

- Identify preferred and alternative routing, including acceptable deviations.
- Strive to minimize product exposures to communities or populated areas, including downtown areas; avoid tunnels and bridges where possible; and expedite transportation of the shipment to its final destination.
- Minimize stops en route; if you must stop, select locations with adequate lighting on well-traveled roads and check your vehicle after each stop to make sure nothing has been tampered with.
- Consider using two drivers or driver relays to minimize stops during the trip. Avoid layovers, particularly for high hazard materials.
- Shippers and rail carriers should cooperate to assure the security of rail cars stored temporarily on leased tracks.
- If materials must be stored during transportation, make sure they are stored in secure facilities.
- Train drivers in how to avoid highjacking or stolen cargo—keep vehicles locked when parked and avoid casual conversations with strangers about cargoes and routes.
- Consider whether a guard or escort for a specific shipment or hazardous material is appropriate.

- Consider using advanced technology to track or protect shipments en route to their destinations. For example, you may wish to install tractor and trailer anti-theft devices or use satellite tracking or surveillance systems. As an alternative, consider frequent checks with drivers by cell phone to ensure everything is in order.
- Install tamper-proof seals on all valves and package or container openings.
- Establish a communication system with transport vehicles and operators, including a crisis communication system with primary and back-up means of communication among the shipper, carrier, and law enforcement and emergency response officials.
- Implement a system for a customer to alert the shipper if a hazardous materials shipment is not received when expected.
- When products are delivered, check the carrier's identity with shipping documents provided by the shipper.
- Get to know your customers and their hazardous materials programs. If you suspect you shipped or delivered a hazardous material to someone who may intend to use it for a criminal purpose, notify your local FBI office or local law enforcement officials.

- Report any suspicious incidents or individuals to your local FBI office and to local law enforcement officials.

V. Additional Information

Up-to-date information is a key element of any security plan. You should consider methods to:

- (1) Gather as much data as you can about your own operations and those of other businesses with similar product lines and transportation patterns;
- (2) Develop a communications network to share best practices and lessons learned;
- (3) Share information on security incidents to determine if there is a pattern of activities that, when considered in isolation are not significant, but when taken as a whole generate concern; and
- (4) Revise your security plans as necessary to take account of changed circumstances and new information.

CONTACTS & INFORMATION SOURCES

FEDERAL AGENCIES

Research and Special Programs Administration, U.S. Department of Transportation, 400 7th Street, SW, Washington, DC 20590, Telephone: 800-467-4922 (Hazardous Materials Information Center), hazmat.dot.gov

Federal Aviation Administration, 800 Independence Avenue, SW, Washington, DC 20591, Telephone: 202-366-4000, www.faa.gov

Federal Motor Carrier Safety Administration, U.S. Department of Transportation, 400 7th Street, SW, Washington, DC 20590, 202-366-2519, www.fmcsa.dot.gov

Federal Railroad Administration, U.S. Department of Transportation, 1120 Vermont Ave., NW, Washington, DC 20590, www.fra.dot.gov

United States Coast Guard, 2100 Second Street, SW, Washington, DC 20593, Telephone: 202-267-2229, www.uscg.mil

Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, Telephone: 202-260-2090, www.epa.gov

Occupational Safety and Health Administration, 200 Constitution Avenue, NW, Washington, DC 20210, Telephone, www.osha.gov

INDUSTRY ASSOCIATIONS AND ORGANIZATIONS

American Chemistry Council, 1300 Wilson Boulevard, Arlington, Virginia 22209, Telephone: 703-741-5000, www.americanchemistry.com

American Petroleum Institute, 1220 L Street, NW, Washington, DC 20005, Telephone: 202-682-8000, www.api.org

American Society for Industrial Security, 1625 Prince Street, Alexandria, Virginia 22314, Telephone: 703-519-6200, www.asisonline.org

American Trucking Associations, 2200 Mill Road, Alexandria, Virginia 22314, Telephone: 703-838-1700, www.truckline.com

Association of American Railroads, 50 F Street, NW, Washington, DC 20001-1564, Telephone: 202-639-2100, www.aar.org

Center for Chemical Process Safety, American Institute of Chemical Engineers, 3 Park Ave, New York, N.Y. 10016-5991, Telephone: 212-591-7319, www.aiche.org/ccps

Chlorine Institute, Suite 506, 2001 L Street, NW, Washington, DC 20036, Telephone: 202-775-2790, www.cl2.com

Compressed Gas Association, 4221 Walney Rd., 5th Floor Chantilly, Virginia 20151, Telephone: 703-788-2700, www.cganet.com

Fertilizer Institute, Union Center Plaza, Suite 430, 820 First Street, NE., Washington, DC 20002, Telephone: 202-962-0490, www.tfi.org

Institute of Makers of Explosives, Suite 310, 1120 19th Street, NW, Washington, DC 20036, Telephone: 202-429-9280, www.ime.org

National Association of Chemical Distributors, Suite 1250, 1560 Wilson Boulevard, Arlington, Virginia 22209, Telephone: 703-527-6223, www.nacd.com

National Propane Gas Association, Suite 100, 600 Eisenhower Lane, Lisle, Illinois 60532, Telephone: 630-515-0600, www.npga.org

National Tank Truck Carriers, 2200 Mill Road, Alexandria, Virginia 22314, Telephone: 703-838-1960, www.tanktransport.com

Security Industry Association, 635 Slaters Lane, Alexandria, Virginia 22314, www.siaonline.org

Synthetic Organic Chemical Manufacturers Association, Suite 700, 1850 M Street, NW, Washington, DC 20036, Telephone: 202-721-4100, www.socma.com

SHIPPERS AND CARRIERS ADVISORY NOTICE

ENHANCED SECURITY MEASURES



U.S. Department of Transportation
Research and Special Programs
Administration

Shippers and carriers can do a lot to enhance the security of hazardous materials shipments during transportation. The Department of Transportation and other Federal agencies can provide timely and accurate information to assist you with your personnel, facility, and en route security issues.

In the wrong hands, hazardous materials pose a significant security threat, particularly those that may be used as weapons of mass destruction. If you offer, transport, or store hazardous materials in transit, you should review your security measures and make any necessary adjustments to improve the secure transport and storage of hazardous materials shipments.

This brochure identifies several voluntary security measures you may wish to consider. It also addresses personnel, facility, and en route security issues and includes contact points for obtaining additional, more detailed information.

We encourage you to consider implementation of the following measures as appropriate to your industry and operations. You should consider actions commensurate with the level of threat posed by the specific hazardous materials you handle.

In addition, you should be aware that there are other security requirements that may apply to your operations.

I. Security Plan



The most important action a shipper or carrier should consider is the development and implementation of a security plan. You can use a risk management model to assess security risks and develop appropriate measures to reduce or eliminate risk. Most risk management models utilize the following steps:

- (1) Identify areas of concern and partners that may be affected or with whom coordination may be appropriate;
- (2) Assemble detailed information on system operations;

- (3) Identify control points where intervention can reduce or eliminate risk;
- (4) Select and prioritize options to meet identified security goals;
- (5) Take action to implement the strategy;
- (6) Verify implementation of the strategy; and
- (7) Evaluate the effectiveness of the strategy to determine whether additional actions are necessary.

Begin with a list

You may first want to list the materials you handle, and identify those materials with the potential for use as weapons of mass destruction or targets of opportunity. Then, consider a review of your current activities and operations from a transportation security perspective. Ask yourself, “What are we doing now? What could go wrong? What can we do differently?” The next step is to consider how to reduce the risks you have identified. For hazardous materials transportation, a security plan likely will focus on personnel, facility, and en route security issues. To assist you in performing appropriate risk assessments, we have posted a Risk Management Self-Evaluation Framework on our website (<http://hazmat.dot.gov>).



II. Personnel Security

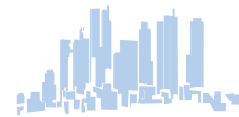
Your employees can be one of your most critical assets as you endeavor to improve the security of your shipping or transportation operations. You should consider taking one or more of the following actions:

- Ensure your employees are familiar with your security plan and properly trained in its implementation. Training should include company security objectives, specific security procedures, employee responsibilities, and organizational security structure.
- Encourage your employees to report suspicious incidents or events.
- Implement routine security inspections.
- Convene regular employee/management meetings on security measures and awareness.
- Communicate with your staff using an internal communication system to provide information on facts, trends, updates, and the like. Because Internet communications may be accessed by others, consider alternative methods for communicating sensitive information.

Employees as a security risk

You should be aware of the possibility that someone you hire may pose a potential security risk. You should consider establishing a process to verify the information provided by applicants on application forms or resumes, including checking with former and current employers and personal references provided by job applicants.

III. Facility Security



Access to your facility should be another security concern and you should consider taking one or more of the following steps to prevent unauthorized access to your facility.

Actions you should take

- Establish partnerships with local law enforcement officials, emergency responders and other public safety agencies with jurisdiction over your facility. Through such relationships, you can learn about threats, trends, and unsuccessful security programs.
- Request a review of your facility and security program by local law enforcement officials.
- Restrict the availability of information related to your facility and the materials you handle. Encourage authorities in possession of information about your facility to limit disclosure of that information on a need-to-know basis.
- Add security guards and increase off-hours patrols by security or law enforcement personnel.
- Improve fencing around your facility. Check the adequacy of locks and other protective equipment. Consider equipping access gates with timed closure devices. Conduct frequent inspections.
- Install additional lights, alarm systems, or surveillance cameras.
- Restrict access to a single entry or gate.
- Place limits on visitor access; require visitors to register and show photo identification and have someone accompany visitors at all times.
- Require employees to display identification cards or badges.
- Conduct security spot checks of personnel and vehicles.
- Upgrade security procedures for handling pick-ups and deliveries at your facilities. Verify all paperwork and require pick-ups and deliveries be handled only by appointment with known vendors. Require vendors to call before a delivery and to provide the driver's name and vehicle number. Accept packages and deliveries only at the facility front gate.
- Secure hazardous materials in locked buildings or fenced areas. Have a sign-out system for keys.
- Secure valves, manways, and other fixtures on transportation equipment when not in use. Lock all vehicle and delivery trailer doors when not in use. Secure all rail, truck, and barge containers when stored at your location.
- Use tamper-resistant or tamper-evident seals and locks on cargo compartment openings.

- Periodically inventory the quantity of hazardous materials you have on site in order to recognize if a theft has occurred.
- Keep records of security incidents. Review records to identify trends and potential vulnerabilities.
- Report any suspicious incidents or individuals to your local Federal Bureau of Investigation (FBI) office and to local law enforcement officials.

IV. En Route Security



Shippers and carriers can work together to assure the security of hazardous materials shipments en route from origin to destination.

Shippers should assess the transportation modes or combinations of modes available for transporting specific materials and select the most appropriate method of transportation to ensure efficient and secure movement of product from origin to destination.

Know your carriers

Yes, know your carrier and have a system for qualifying the carriers used to transport hazardous materials.

- Use carrier safety ratings, assessments, safety surveys, or audits and ask the carrier to provide information on security measures it has implemented.
- Verify the carrier has an appropriate employee hiring and review process, including background checks, and an on-going security training program.
- Verify the identity of the carrier and/or driver prior to loading a hazardous material.
- Ask the driver for photo identification and commercial drivers license for comparison with information provided by the carrier.
- Ask the driver to tell you the name of the consignee and the destination for the material and confirm with your records before releasing shipments.

In the wake of the September 11th attacks and continuing terrorists threats, shippers and carriers who offer, transport, or store hazardous materials in transit have a greater responsibility of safeguarding personnel, facility, and the transport of hazmat. DOT/RSPA offers the following voluntary measures to assist your development of a security plan appropriate to your industry and operations.